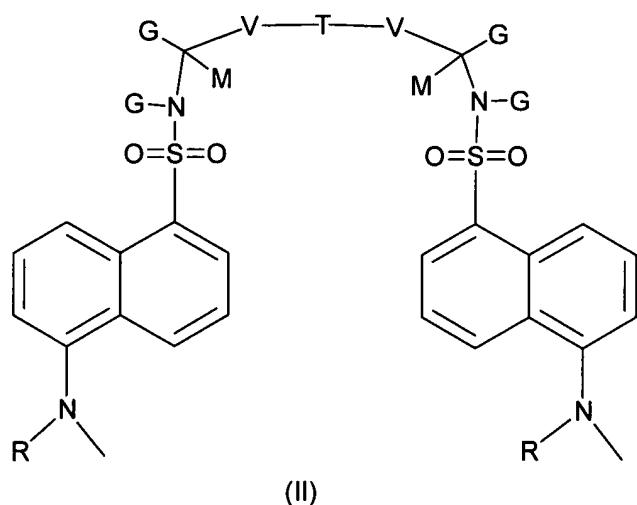


**Attachment B**

1-83. (Canceled)

84. (new) A compound represented by the structure set forth in formula (II):



including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula II;

wherein G groups may be the same or different and are selected independently among hydrogen,  $-(CH_2)_m(COOH)$  and COOH such that said compound of formula II comprises one or two carboxyl groups, wherein m is an integer of 1,2 or 3;

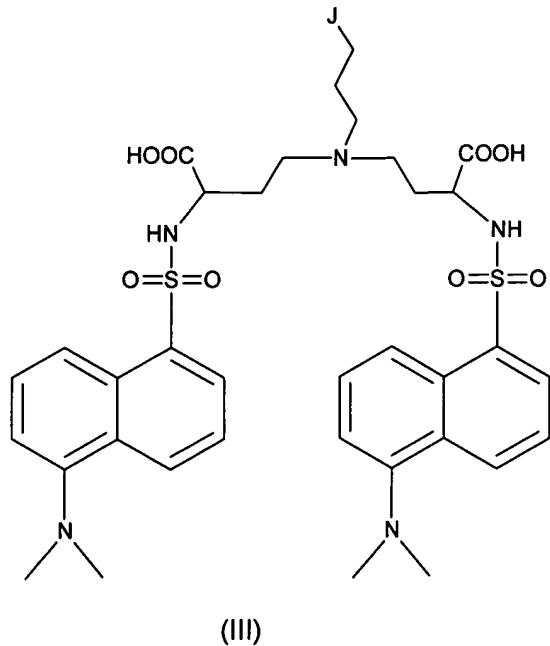
V groups may be the same or different and are selected among null or  $-(CH_2)_k-$  ; k being 1 or 2;

M groups may be the same or different, and are each independently selected from null, hydrogen, alkyl-amide, hydroxyalkyl and fluoroalkyl, wherein said alkyl has 1, 2 or 3 carbon atoms; and

T is -O-, -S-, -NH-, -N(B)-, -Q-, and -N(B'-Q)-, -N(B'-OH)-, -and -N(B'-F)- wherein B is an optionally substituted alkyl of 1, 2, 3, 4, 5 or 6 carbon atoms and B' is an optionally substituted alkylene of 1, 2, 3, 4, 5 or 6 carbon atoms;

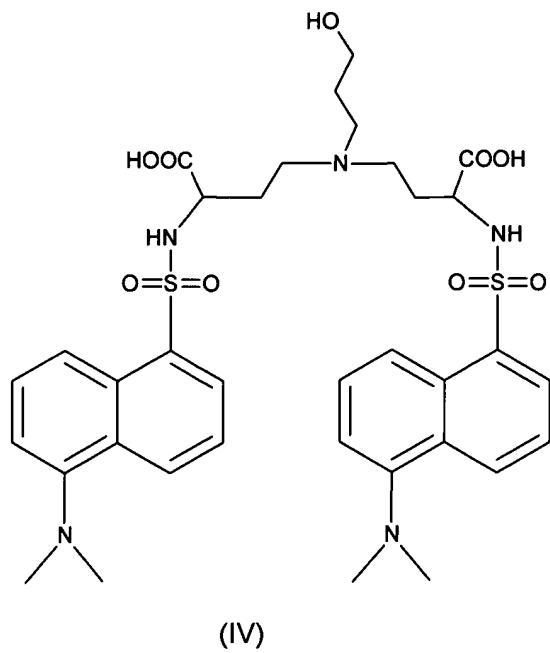
Q is a marker for imaging or a metal chelate; said marker for imaging being selected from the group comprising a fluorescent label, a radio-label, a marker for X-ray, a marker for MRI, a marker for PET scan, or a label capable of undergoing an enzymatic reaction that produces a detectable color.

85. (new) The compound of Claim 84 represented by the structure set forth in formula (III):



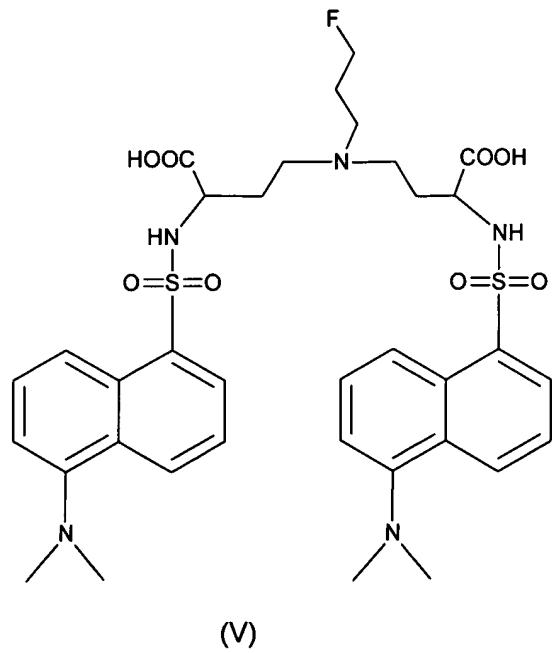
wherein J is selected among hydrogen, -OH, and -Q; wherein said Q is selected among an N<sub>2</sub>S<sub>2</sub> chelator and -F; including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula III.

86. (new) The compound of Claim 85 represented by the structure set forth in formula (IV):



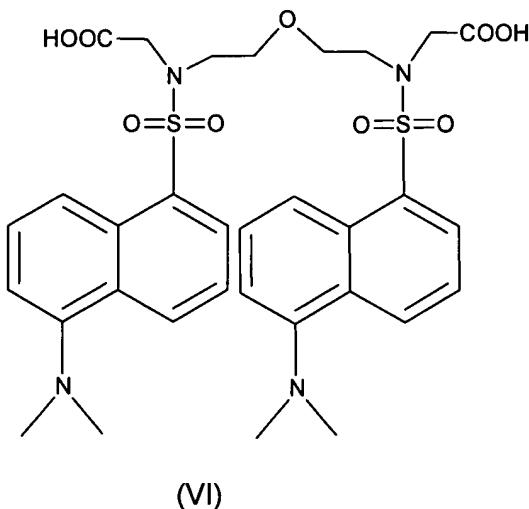
including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula IV.

87. (new) The compound of Claim 85 represented by the structure set forth in formula V:



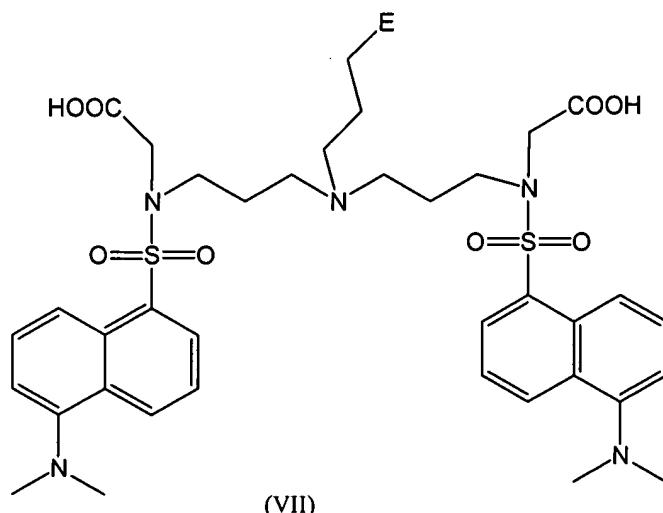
including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (V).

88. (new) The compound of Claim 85 represented by the structure set forth in formula VI:



including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (VI).

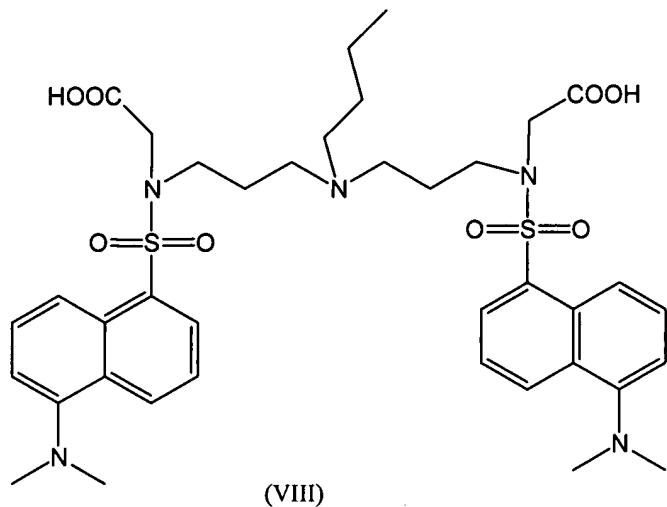
89. (new) The compound of Claim 84 represented by the structure set forth in formula VII:



wherein E is selected from -OH, -F, -CH<sub>3</sub> and Q; wherein said Q is selected from an N<sub>2</sub>S<sub>2</sub> chelator and -F;

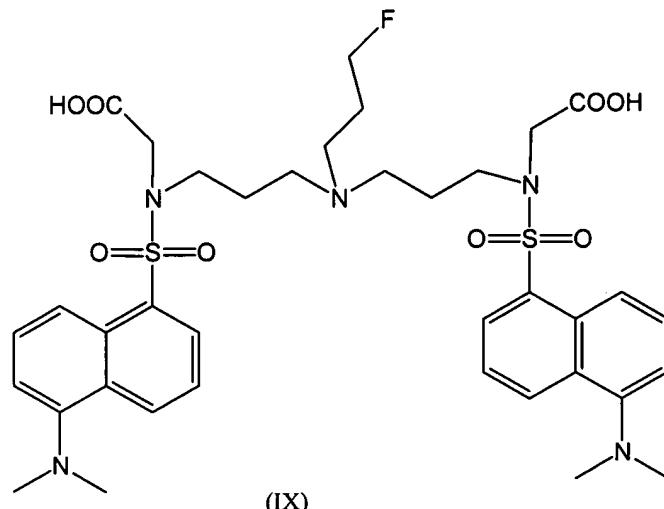
including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (VII).

90. (new) The compound of Claim 89 represented by the structure set forth in formula VIII:



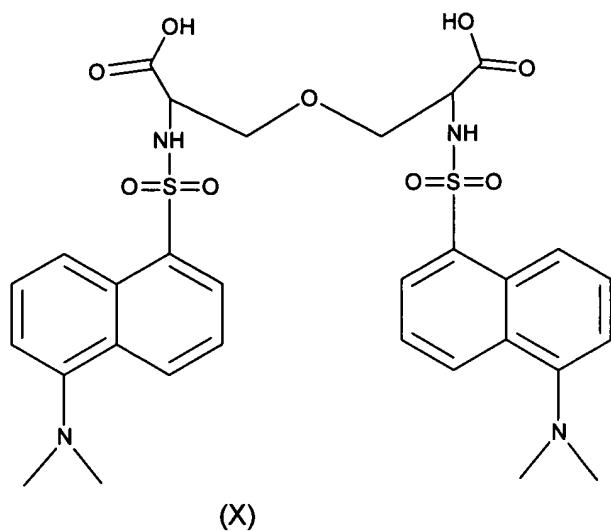
including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (VIII).

91. (new) The compound of Claim 89 represented by the structure set forth in formula IX:



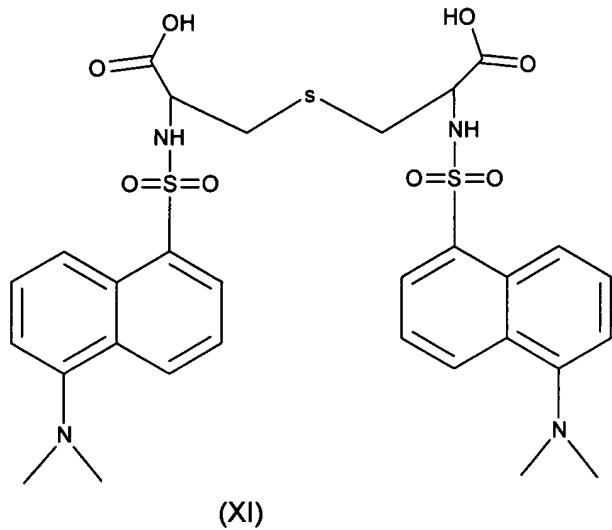
including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (IX).

92. (new) The compound of Claim 84 represented by the structure set forth in formula X:



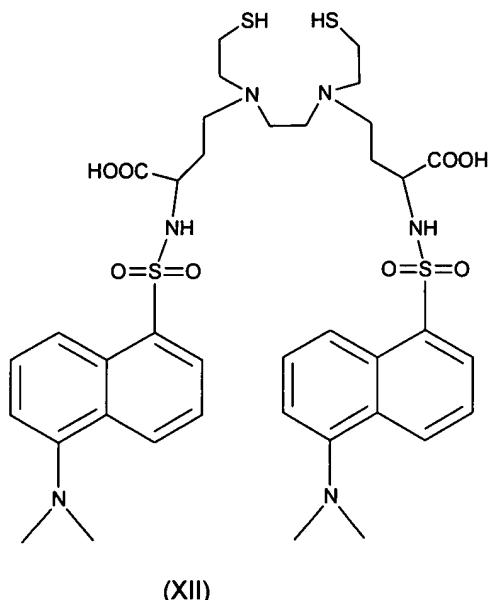
including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (X).

93. (new) The compound of Claim 84 represented by the structure set forth in formula XI:



including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (XI).

94. (new) The compound of Claim 84 represented by the structure set forth in formula XII:



(XII)

including pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula XII.

95. (new) The compound of Claim 84, wherein the chelated metal is selected among Technetium, oxo-technetium, Rhenium and oxo-rhenium radioisotopes.

96. (new) A diagnostic agent comprising a compound according to claim 84 and a metal said metal being comprised within the Q moiety of the compound of claim 84.

97. (new) A composition comprising as an active component a compound according to claim 84 and a biologically acceptable carrier, said active component having detectable properties of its own, being capable of chelating a detectable label or being covalently-linked to a detectable label.

98. (new) A compound according to claim 84, comprising or being linked to a marker for imaging, wherein said marker for imaging is Tc, Tc=O, In, Cu, Ga, Xe, Tl, Re and Re=O, <sup>123</sup>I, <sup>131</sup>I, Gd(III), Fe(III), Fe<sub>2</sub>O<sub>3</sub>, Fe<sub>3</sub>O<sub>4</sub>, Mn(II) <sup>18</sup>F, <sup>15</sup>O, <sup>18</sup>O, <sup>11</sup>C, <sup>13</sup>C, <sup>124</sup>I, <sup>13</sup>N, <sup>75</sup>Br, Tc-99m or In-111.

99. (new) A method for the detection of cells having perturbed membranes (PM cells) in a cell sample, the method comprising:

(i) contacting the cell sample with a compound according to claim 84; and

(ii) detecting the amount of agent bound to said cells, wherein a significant amount of agent bound to said cells indicating the presence of PM in said cells..

100. (new) A method for the detection of physiological disorders characterized by the presence of cells having perturbed membranes (PM cells) comprising the steps of:

- (1) administering a diagnostic agent according to claim 96; and
- (2) imaging the patient, so as to identify the presence of cells having perturbed membranes.

101. (new) A method according to Claim 100, wherein the diagnostic agent comprises a radiolabel, and the detection of the medical disorders is by a radio-imaging technique.

102. (new) A method according to Claim 100, wherein the diagnostic agent comprises a radiolabel, and the detection of the medical disorders is by single photon emission computed tomography (SPECT), or positron emission tomography (PET).

103. (new) A method according to Claim 100 for the detection of cells undergoing a death process.

104. (new) A method according to Claim 103, for the detection of cells undergoing apoptosis.

105. (new) A method according to Claim 100, for the detection of procoagulant particles, selected among activated platelets, platelet-derived microparticles, and apoptotic bodies.

106. (new) A method according to Claim 100, for the detection of a blood clot.

107. (new) A method according to Claim 100, for the detection of activated inflammatory cells, selected among activated white blood cells and activated tissue macrophages.

108. (new) A method according to Claim 100, for detection of cell death within a tumor, for monitoring of aggressiveness of a tumor, or for detection of metastases of a tumor.

109. (new) A method according to Claim 100, for monitoring death of tumor cells in response to an anti-cancer treatment, selected from chemotherapy and radiotherapy.